

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/031250 A1

(51) International Patent Classification⁷: **G01B 7/14**

(21) International Application Number:
PCT/GB2004/003020

(22) International Filing Date: 12 July 2004 (12.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0322655.2 27 September 2003 (27.09.2003) GB

(71) Applicant (for all designated States except US): **FUTURE TECHNOLOGY (R & D) LIMITED** [GB/GB]; Unit 3, Dene Valley Business Centre, Brookhampton Lane, Kineton, Warwick CV35 0JD (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **ELLIOTT, Howard** [GB/GB]; Unit 3, Dene Valley Business Centre, Brookhampton Lane, Kineton, Warwick CV35 0JD (GB).

(74) Agent: **SERJEANTS**; 25 The Crescent, King Street, Leicester LE1 6RX (GB).

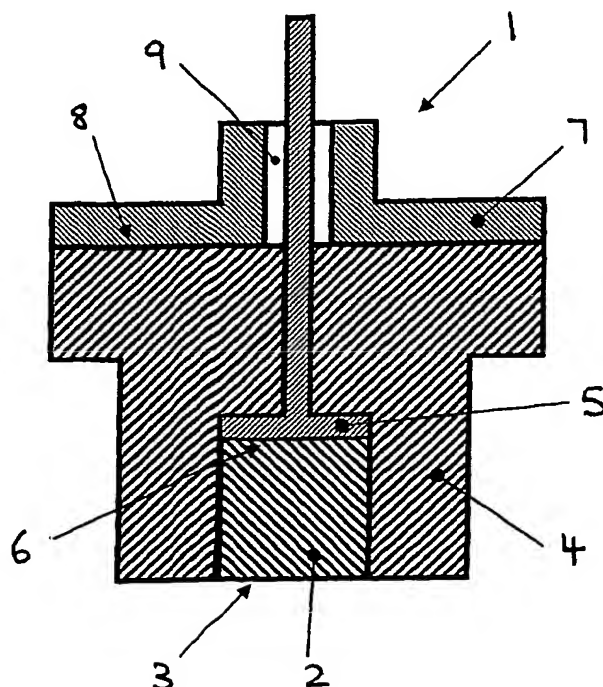
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: **SENSOR FOR CAPACITIVELY MEASURING THE DISTANCE TO AN OBJECT**



(57) Abstract: The invention provides a sensor (1) for capacitively measuring the distance to a stationary or passing object. The sensor (1) has an electrode (2) that capacitively couples with the object and is formed from an electrically conductive ceramic material. The electrode (2) is substantially surrounded by a housing (4) formed from an electrically non-conductive ceramic. The electrically conductive and electrically non-conductive ceramic materials are chosen to that they have the similar thermal expansion coefficients so that the sensor (1) remains virtually stress free at high temperatures.

WO 2005/031250 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.